2010 Annual Report on Information Technology

in Maine State Government

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Preface

This report fulfills the statutory reporting requirements of the Chief Information Officer set forth in the Maine Revised Statutes, Title 5, Chapter 163 §1973 subsection 3; and §1974 subsections 5 and 6.

Foreword

2010 was a busy year for the Office of Information Technology (OIT) given significant budget challenges and increasing demands for technical services. Our challenge was "to do more with less," and our emphasis was on working with our business partners to develop innovative ways of delivering services directly to the citizens of Maine.

During the past year, the federal government placed increasing demands on the State that required modifications to dozens of key information systems. These demands were felt in varying degrees across the Executive Branch and required technical support from all aspects of OIT: application development; infrastructure support and maintenance; and, policy, control and planning. For example, on several occasions the Department of Labor was directed to adjust unemployment benefits within short timeframes. OIT was able to meet such demands and actually become very adept at implementing changes quickly and efficiently.

A significant milestone in 2010 was that the Maine Integrated Health Management Solution (MIHMS) was implemented successfully in September 2010. This outsourced service replaced the MaineCare Claims Management System (MECMS). Federal requirements also spurred OIT to build the foundation for the exchange of electronic health information as part of the Health Information Technology/ Health Information Exchange initiative. OIT also helped facilitate the exchange of health insurance information as part of a larger "no-wrong-door" method of obtaining insurance coverage.

State agencies undertook several significant initiatives as well, requiring new kinds of technical support from OIT. These initiatives included the adoption of an Automated Payment Card (APC) for unemployment benefits for the Department of Labor. Along with direct deposit, the APC moves the Unemployment program away from paper checks and towards a completely electronically managed program, reducing costs and speeding the delivery of funds to unemployed Maine citizens.

OIT also responded to various legislative and statutory mandates, such as the requirement of a licensing system for the Maine Medical Marijuana Program. By building on the existing Agency Licensing Management System (ALMS) as it developed the new program, OIT delivered a solution within two months at a cost of roughly $60,000. Other states have spent as much as $750,000 for similar solutions. While leveraging existing systems does not always lead to reduced development costs, in this case, it was the best way forward. The success of the project demonstrates the benefits of systems integration and of reusing IT assets.

OIT continues to work with the Departments of Transportation, Public Safety, Inland Fisheries and Wildlife, Conservation, and Marine Resources to develop the Maine State Communication

Network (MSCommNet). This project consolidates all radio communication systems under the support structure of OIT. In 2009, OIT signed a contract with Harris Corporation to build the MSCommNet infrastructure, and, in 2010, worked to finalize land acquisition and create a frequency assignment and allocation plan. As part of this project, we have established partnerships with a federal agency (U.S. Customs and Border Protection), municipalities, and private entities (when appropriate) to develop a robust public safety communications system that will meet the State's public safety communication needs and provide shared use among agencies far into the future.

In 2010, budget limitations presented a challenge for all State entities. OIT was able to help our agency partners meet their budget obligations by reducing rates for fiscal years 2010 and 2011 by $2.189 million per year in General Fund expenditures. Actual cost reductions, factoring in federal matching funds, were just under $5.6 million. These rate reductions over the past biennium were achieved through consolidation and economies of scale.

In collaboration with its government and private business partners, OIT continues to address the challenge of limited resources by:

- Consolidating, standardizing, and leveraging existing IT applications, equipment, and infrastructure to reduce overall cost to the State.
- Sharing IT staff to support multiple agencies.
- Working with private contractors whenever necessary and wherever possible to obtain the best value for the State.
- Marketing our IT services model to other state governments (county and local) by creating and refining a business environment based on a fee for service rate structure.

However, continued rate reductions and cost-cutting measures, without a counterbalance of expenditures to renew and maintain the IT infrastructure and provide new IT solutions, will severely hamper our ability to meet the increasing demands for technology. Our State agency partners, although appreciative of the steps we have taken, recognize the need to leverage technology to meet the demands being placed on them by smaller workforces, expanding workloads, and limited funding. They understand that strategic investment in IT is a crucial part of the development of improved delivery models and services.

Information technology is an essential component of State government. It is embedded in virtually every business process, delivering the data necessary to transact business, support agency programs and missions, and providing on-line services via web portals directly to the citizens of Maine. When properly employed with agency partnerships in data sharing and improved processes, including well-considered data retention strategies, technology will position the State of Maine as a leader in providing efficient, effective citizen services.

Despite the fiscal challenges facing the State of Maine, OIT continues to evolve as a premier IT support organization capable of meeting the changing agency requirements and continued demands for data sharing, availability, and integrity. We listen to our customers and are constantly exploring ways to improve our delivery model and opportunities to share resources. We are better because our customers hold us accountable, and we are committed to quality in all levels of our organization.

Overview of the Office of Information Technology (OIT)

Established in 2005 by executive order, the Office of Information Technology (OIT) is an office within the Department of Administrative and Financial Services (DAFS) that provides consolidated IT services and support for all Executive Branch Agencies and selected IT services (such as networks) State-wide to other branches of government and the Constitutional Offices as well.

The Office of Information Technology (OIT) is currently headed by the CIO, Greg McNeal. The Chief Technology Officer, Wayne Gallant, is responsible for networks, voice services, radio operations, data centers, servers, desktop/ laptop computers, and IT customer support. The Associate CIO for Applications, Jim Lopatosky, oversees application systems development and management, software development lifecycles, application management practices, systems programming and design, and systems integration. The Project Management Office Director, David Maxwell, promotes better project management practices, and provides oversight to key IT projects on behalf of the CIO.

Prior to the IT consolidation of 2005, agencies were autonomous in their management of applications. Sixteen application support teams existed in the larger State agencies. In the 2005 merger, the teams were consolidated under nine Agency IT Directors, whose responsibility was to oversee IT services for their assigned agencies, and provide application development and support services to those same agencies. Four years later, the application development and support staffs were consolidated under a new Associate CIO for Applications. With this organizational alignment came a strengthened commitment to promote enterprise-wide application systems, supporting multiple agencies and lines of business. See: http://www.maine.gov/tools/whatsnew/index.php?topic=oit_news&id=71065&v=article.

Major functions and responsibilities

IT Budget: The overall IT budget for fiscal year 2011 is $147.556 million. Of this, $45.142 million is from the General Fund, $51.204 million is from Federal funds, and $51.210 million is from various other funds. It should also be noted that technology budgets projections for the upcoming FY12/13 biennium are $146.3 million for 2012 and $146.5 million for FY 2013, continuing to show reductions based on economies of scale, standardization, and an effective public/private relationship.

OIT Policies: OIT operates under a set of policies that define and support the mission of the organization and provide guidance to customers, vendors, and internal staff. The policies can be viewed at: http://www.maine.gov/oit/policies/.

Staffing and Organization: OIT has 463 employees (currently filled). At the time of the OIT consolidation in 2005, OIT had 495 filled positions, so OIT is significantly leaner than five years ago. For OIT's organizational structure, see the attached chart and www.maine.gov/oit/about/org_structure/index.html.

Key Contacts:

- **Chief Information Officer (CIO):** Greg McNeal, 624-9471 (cell 215-7849), Greg.McNeal@maine.gov
- **CIO's Administrative Assistant:** Judy Beloff, 624-7568 (cell 215-2303), Judy.A.Beloff@maine.gov
- **Chief Technology Officer (CTO):** Wayne Gallant, 624-9424 (cell 592-1453), Wayne.E.Gallant@maine.gov
- **Associate CIO for Applications:** Jim Lopatosky, 624-7573 (cell 441-6731), Jim.Lopatosky@maine.gov
- **Project Management Office Director:** David Maxwell, 624-9793 (cell 446-9793), David.W.Maxwell@maine.gov
- **OIT Help Desk (answered 24x7):** 624-7700, OIT.Customer-Support@maine.gov

Current OIT Initiatives

Online Government: Since its creation, OIT has played a central role in the State's efforts to use the Internet to deliver government services. OIT provides the direction and infrastructure support needed by State agencies to take government online and make it less expensive, more effective, and better able to meet the expectations of the public. Agencies provide electronic services to the public either directly through OIT or indirectly through InforME, a public/ private partnership. Whichever the case, the CIO's policy and planning efforts provide the leadership and vision needed to maximize the State's investments in eGovernment, and to present to the public a unified and consistent web presence. The CIO serves on the InforME Board and provides staff that facilitates the Board's efforts, coordinate agency activities, and manage the InforME Network Manager Contract. See the Online Services section of the Maine website at: http://www.maine.gov/portal/online_services/.

Maine State Communications Network (MSCommNet): The purpose of MSCommNet is to replace seven disparate, inconsistently reliable land mobile radio systems operated by individual State agencies with a consolidated, standards-based, land mobile radio system, compliant with the standards of the Federal Communications Commission (FCC) and serving all State agencies. In June 2009 OIT engaged Harris Corporation as the system integrator to design and deploy the new radio system prior to the FCC's January 1, 2013 mandate. This $55 million effort is scheduled to be completed by October 2012. For more on the MSCommNet project, see www.maine.gov/mscommnet.

Network: In 2009 OIT, Maine State Library, Department of Education, and University of Maine System formed the NetworkMaine consortium to serve the consolidated needs of the major public sector network entities. These needs and goals included increased bandwidths, new technologies, and overall better value service. The result of this effort is the nearly complete upgrade of the Maine School and Library Network (MSLN) and the beginning of the Maine

State government network upgrade. These two networks together serve over 1,000 State offices, schools, and libraries state-wide.

Broadband: Maine's ConnectME Authority is an independent entity created to provide broadband access in the most rural, un-served areas of the State with the goal of stimulating private investment in technology infrastructure. Maine's broadband infrastructure (that is, cable television services and high-speed access to the Internet through cable and telephone service providers) and acceptance and utilization rates where broadband is available, are less than the national average. Economic reports indicate that for every one percentage point increase in broadband penetration in a state, employment is projected to increase by 0.2 to 0.3 percent per year.

The ConnectME Authority is governed by a five-member Board consisting of three private sector members and two public sector members, one of whom is the CIO. The Authority does not receive General Funds. It uses other dedicated state and federal funds along with private sector dollars to award grants to expand affordable broadband service. The Authority is currently conducting a fifth round of grant funding.

Maine has received federal funding awards for five public and private broadband-related projects totaling over $42.5 million in grants that resulted in over $55 million in new projects and investment. For example, the Authority received $5 million to map and plan broadband expansion. The mapping identifies schools, medical offices, small businesses, and homes to show where broadband is available and, more importantly, where it is not. The grant then provides funding to link private and public partners to upgrade internet service for initiatives such as tele-health, business expansion, and education. Also, the Authority supported the successful $25.4 million federal grant, called the "Three Ring Binder" Middle Mile Project, awarded to a private company (Maine Fiber Company) to connect and expand high-speed Internet service to rural areas of the state. These grants are bringing broadband services to many new areas of the state and providing benefits to the health, education, and economic sectors.

For more on Maine's ConnectME Authority and broadband service in Maine, see: www.maine.gov/connectme/.

Wireless Service Expansion: Mobile employees and technology advances are driving the need for increased wireless connectivity. To this end OIT has a strategic vision to expand the availability of wireless access at its State offices. In addition to secure access to State information assets for State employees, an open unsecured wireless public option is generally available for citizens and customers visiting State offices.

Achieving Economies through Server Consolidation and "Virtualization": One of the major goals of the consolidation begun in 2005 is the standardization of server platforms. OIT has made significant strides in this area through the use of virtualization tools and working with our private partner, VMWare. OIT has been able to achieve a virtualization ratio of 16 to 1. What this means is that for every 16 physical servers we once had, we have been able to perform the same level of work and support on only one physical server operating as 16 "virtual instances." The numerous benefits of this approach include reduced overall operating costs, enhanced

scalability, reduced server setup time, improved business continuity, and better security. OIT has made significant progress reducing the hundreds of Windows-based servers used by the State, and is also looking at opportunities for virtualization in the Unix server environment.

Application Systems: OIT is taking a strategic approach at leveraging existing investments in applications, the most expensive aspect of IT services, and in making intelligent investments in applications going forward. This past year, OIT has implemented the IT Product Acquisition Policy requiring an evaluation that includes: first, re-use of existing systems wherever possible; second, procure systems that have already been developed and will meet the business need (often called COTS or Commercial Off-The-Shelf software); and third, to develop a custom solution if no other option exists. This policy extends IT resources beyond the bounds of application teams supporting specific agencies, as in the old pre-2005 IT State IT model and allows the IT community to look State-wide for business solutions for the agencies.

To assist in this effort, OIT has created an application inventory, documenting the IT systems in the Executive Branch, the high-level business needs they meet, the data they pass to each other, the technologies utilized to develop them, and the business areas they serve. This inventory will allow OIT to identify opportunities for shared usage or re-use of existing systems. For example most recently, an existing licensing system was used to quickly implement a Medical-Marijuana facility certification system. This solution was similar in functionality to a special purpose standalone system, but because it leveraged an existing application framework, it could already share data with several other applications at no additional cost. Sharing systems also keeps the costs of managing applications down because they can share hosting environment as well.

Similarly, OIT is continuing to consolidate applications that serve other business functions common to multiple State agencies. These include:

- Licensing and certification
- Document management and imaging
- Common clients and common providers (using the business driver provided by the Health Information Technology (HIT)/ Health Information Exchange (HIE) federal directives)
- Common financial data-warehousing
- Geographic information systems (GIS)
- Human resource and payroll systems

In addition, OIT has begun investing in business intelligence tools that not only promote easy access to information, but also provide an easy-to-view dashboard for business operations. These dashboards, with “drill-down” capability, are either in place or being further developed for the Department of Transportation, the Department of Labor, and the Department of Health and Human Services.

Given that funding for investment in new or improved systems and infrastructure is increasingly difficult to obtain, commitment to delivery of properly scoped projects both on time and within budget is even greater. To that end, OIT will be placing more emphasis on promoting project management and its value, as well as enhancing, where appropriate, project management skills among OIT staff and individuals elsewhere in State government who function, even occasionally, in an IT project management role. Also planned is increased focus on useful

metrics to demonstrate the effectiveness of project management, as well as a system for improved reporting of individual projects.

OIT has developed a strategy for budgeting and managing applications at the system level, as opposed to the staff resource level. Included in this is a consistent definition of what application management consists of. This is used as the basis for costing out systems, delineating between keeping the lights on (including keeping current with technology), as opposed to new development efforts.

When referring to "budgeting by the application," OIT is working to ensure that the entire cost of an application is assessed (people, contractors, services, software licenses, network, data centers, etc). It is this entire cost that once identified, will be appropriately billed to State General Fund and federal fund accounts. It provides a better opportunity to take advantage of federal matches and aligns the applications with the business programs they support.

Outsourcing Initiatives

Only a robust public/ private relationship will allow OIT and the State to accomplish all the information technology work that needs to be done. For us to meet the growing demand for technical services we have developed business partnerships in many areas. For example our server virtualization included contracting with VMware to assist us during the implementation phase of our project. VMware provided experienced staff that had done this work before, and provided direction and training for the project. Our technicians have been doing the bulk of the work, and our project managers have been managing the project. The project has gone well, with a great deal of success and minimal setbacks. As we finish the implementation phase and enter into the more stable maintenance and operations phase, our technicians will have been trained and will possess the necessary skills to support the new environment. As we continue expanding the virtual operating environment, we can make adjustments to the system as necessary and with a high degree of confidence.

The public/private relationship also allows us the opportunity to explore outsourcing of individual applications or services as an option within our business model. There are several areas within our organization that we are currently exercising this option. For example to provide network services State-wide requires a robust public/private relationship. The State currently has contracts with several business partners (Fairpoint, Oxford Networks, Verizon, and others) to provide connectivity via Ethernet over Copper (EOC), fiber, and dark fiber that enables State entities to exchange data State-wide on a robust, secure, and reliable network. This relationship also opens several business options and opportunities to partner with all county and municipal governments providing a more robust infrastructure at a shared cost.

Key applications that have been outsourced for efficiency included the Medicaid Management Information System (MMIS). This system was implemented to process Medicaid and MaineCare claims from providers and hospitals. Called MIHMS [Maine Integrated Health Management Solution], this was implemented in September 2010. The implementation was successful in large part because of the lessons learned from the 2005 deployment of MECMS [Maine Claims Management System], which was the predecessor system to MIHMS. The

improvements included better project management, better testing as required by OIT's, Application Deployment Certification Process.

OIT is also engaged in transitioning a key financial system, AdvantageMe, by outsourcing its operation to the vendor that developed it. The State entered into a contract with CGI for managing AdvantageME. This application supports the State's Accounts Receivables, Account Payables, General Ledger, and Procurement functions.

Overall OIT has several contracts with a host of business partners (including InforMe, Microsoft, Oracle, VMWare, EMC, CGI, Molina, and Numara) that promote the public/private relationship needed to build a robust and cost effective system that meets the increasing needs and demands being placed on technology. As an integral part of our business philosophy, OIT continues to evaluate when and how we can adopt outsourcing as a viable solution to meet the business needs of our customers.

Future OIT Goals and Priorities

Financial Management: The overall IT budget for fiscal year 2011 is $147.556 million. Of this, $45.142 million is from the General Fund, $51.204 million is from various Federal funds, and $51.210 million is from various other funds. A joint effort between OIT and the Bureau of Budget now provides the Administration much more detail on where IT dollars are being budgeted in the FY12-13 biennium. The key components of IT costs are clearly visible in the State's Budget and Financial Management System (BFMS). BFMS is able to track agencies' end user services budgets (desktop support, telephone services, e-mail, print services, etc.), applications operations and maintenance budgets, and the cost of new applications initiatives across the Executive Branch. With this level of information available, the budget impact of rate reductions in any IT service area can be calculated. Executives now have a better perspective to make decisions on overall investments/ initiatives in IT projects.

Current budget projections for FY 12-13 biennium are $146 million for each year, a reduction from the 2011 budget which reflects the business trends and the benefits of IT consolidation.

Infrastructure Support:

- **Maine State Communications Network (MSCommNet):** Work on the MSCommNet project is scheduled to be completed in the first half of fiscal year 2013. As described earlier, MSCommNet will replace seven disparate and increasingly unreliable agency land mobile radios systems with a consolidated, standards-based, FCC-compliant, public safety grade land mobile radio system serving all State agencies.

- **Enterprise Data Operations Center:** OIT's lease at 26 Edison Drive expires in October 2012, which will require relocating its 6,000 square foot Enterprise Data Operations Center (EDOC), as well as office space for approximately 200 employees. OIT operates a second data center at the Central Maine Commerce Center (CMCC), but this facility cannot accommodate all the assets for mission-critical systems, nor should it have to, as a second data center is required for business continuity purposes. Efforts are under way to

find a suitable facility, prepare it for operations, and relocate to the new data center prior to October 2012.

- **Network:** As State agencies expand their use of IT to accomplish the business of State government, the IT infrastructure needs to be able to meet the growing demand for capacity, reliability, and security. Specific areas targeted include:
  - Expanding network capacity to accommodate increased data traffic volumes.
  - Improving network fail-over capacity, to ensure continuity of service and to minimize disruption to State government business functions and citizen services.
  - Increasing remote access capacity, to support working from home and off-site.
  - Enhancing network security to ensure the integrity of the State's IT assets.

- **Application Hosting Support:** Significant progress has been made consolidating and virtualizing the hundreds of Windows-based servers that OIT supports. Going forward, OIT plans a similar effort for the Unix servers that host applications and the Oracle database environment. Clustering and virtualization of these servers will provide greater stability and availability of the mission-critical systems and services running on these platforms. Other long term benefits include reduced overall operating costs, enhanced scalability, reduced server instance setup time, improved business continuity, and better security.

Doing the Business of Government through IT

Technology touches every Mainer every day. The InforME 2010 annual report effectively demonstrates the reach and adoption of technology. Whether you are an employer filing taxes over the Internet, a citizen renewing your fishing license on www.Maine.gov, or a State employee answering a citizen phone call – technology is the backbone that makes it possible.

Maine State government has made great strides in service delivery through government partnering. Following are examples of how OIT leverages staff, robust systems, and government partners to meet the ever-changing needs of the 21st century.

IT Is a Good Return on Investment

Key Accomplishments

Increased efficiency:

Over the years, State agencies have used IT as a tool to transform business processes, increase internal efficiency, improve services to citizens, and save money. As just one example, Maine Revenue Services (MRS) has brought millions of dollars of additional revenue to the State through wise investment in technology.

See highlights of IT return-on-investment achieved by a partnership of OIT with Maine Revenue Services: www.maine.gov/tools/whatsnew/index.php?topic=oit_news&id=90773&v=article and www.maine.gov/tools/whatsnew/index.php?topic=oit_news&id=76228&v=article.

Lower rates:

In terms of major accomplishments, the efficiencies of State-wide consolidation have allowed IT rates to generally be reduced over the past five years, as shown by key rates below.

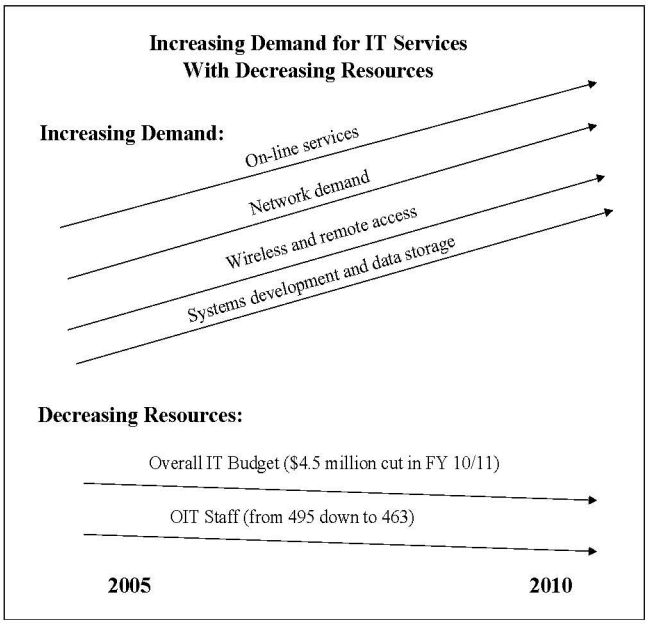
Service	E-mail	File Services	Phone Line	Toll per Minute	WAN	Desktop Support
Fiscal Year						
FY05	$8.50	$30.00	$30.00	$0.05	$34.75	$53.00
OIT Consolidation began in FY06						
FY06-07	$6.50	$25.00	$31.00	$0.04	$34.75	$53.00
FY08-09	$6.00	$19.30	$29.00	$0.04	$33.50	$42.00
FY10-11	$6.29	$18.37	$28.02	$0.04	$34.32	$42.46
Revised FY 10-11	$6.08	$17.94	$27.53	$0.03	$34.14	$39.51
FY 12-13	$4.40	$12.40	$26.89	$0.03	$34.54	$42.41
Decrease since 2005	**-48.20%**	**-58.70%**	**-10.40%**	**-40.00%**	**-0.60%**	**-20.00%**

For all current OIT rates, see: www.maine.gov/oit/services/rates.shtml.

Reduced unit costs:

Since the consolidation of technology resources in 2005, OIT has continued to reduce costs while increasing the level of service provided to agencies. The total expenditures continue to grow as the volume of services provided to agencies grows at a rate greater than the cost reductions.

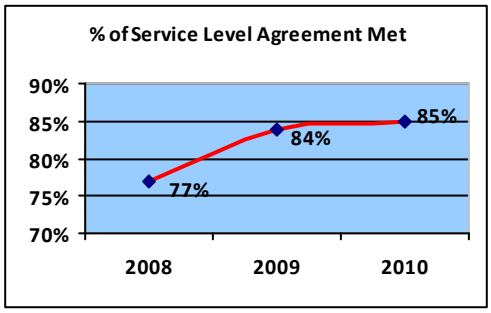
State government in Maine has experienced an accelerated and unprecedented growth in networked devices, storage demands, and Internet-based information exchange with government partners (federal, state, and local). This increased demand places a heavy burden on our infrastructure, especially for network bandwidth. While expand network capacity and improving reliability, OIT has also met its budget obligations. We have reduced rates for fiscal years 2010 and 2011 by $2.189 million per year in General Fund dollars and $5.6 million overall due to reduced expenditure in matching federal funds. However, any further rate reductions will severely hamper our ability to meet the increasing demands for technology. Our State agency partners, although they are appreciative of the rate reductions, recognize the need to invest in technology in order to meet the demands being placed on them with a smaller workforce, expanding workloads, and limited funding.

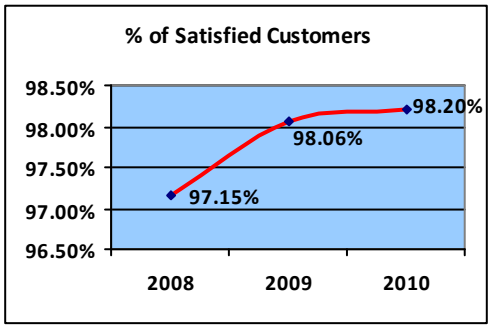


An Additional Measure of Success

Improved Customer Satisfaction: A key accomplishment since 2008 has been the marked improvement in effectiveness of customer support provided to staff in the State agencies, as reported by the users themselves. See charts below. Much of this improvement is due to business process improvements in delivery of desktop computers and support, use of standard operating procedures, and measuring performance against customer expectations.

Currently, our customer satisfaction average is consistently over 97%. See: www.maine.gov/tools/whatsnew/index.php?topic=oit_news&id=124967&v=article





State of Maine
Department of Administrative and Financial Services
Office Information Technology
145 State House Station
Augusta ME 04333-0145
www.maine.gov/oit
207-624-8800